

STANDARD HC49/SMD CRYSTAL (11.4 x 3.5mm)

FEATURES:

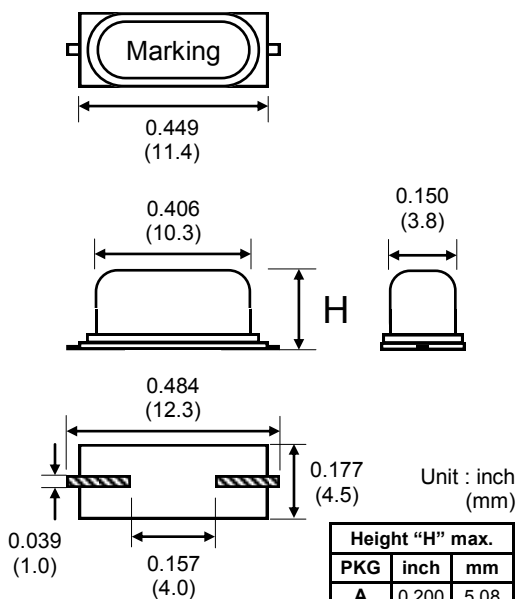
- WIDE FREQUENCY RANGE
- LOW COST / AT CUT
- LOW PROFILE / SUITABLE FOR REFLOW

RoHS
Compliant

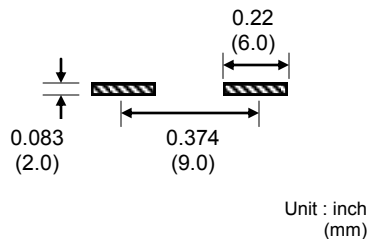


MODEL	HC49/SMD
FREQUENCY RANGE	3.2768 ~ 70.000 MHz
FREQUENCY TOLERANCE	± 30ppm (see below for other options)
TEMPERATURE STABILITY	± 50ppm (see below for other options)
OPERATING TEMPERATURE	STD: 0°C to 70°C (see below for other options)
STORAGE TEMPERATURE	-55°C to 125°C
SHUNT CAPACITANCE	7pF MAX.
LOAD CAPACITANCE	STD: 18pF, (see below for other options)
DRIVE LEVEL	100uW max.
AGING	± 5.0ppm / year @ 25°C ± 3°C
INSULATION RESISTANCE	500MΩ min. at 100VDC ± 15VDC
OPERATION MODE	AT cut Fundamental / Third overtone >30.000MHz
ESR	3.27680MHz ~ 5.999MHz: 180Ω max. (Fundamental) 6.0000MHz ~ 9.9999MHz: 100Ω max. (Fundamental) 10.000MHz ~ 15.999MHz: 60Ω max. (Fundamental) 16.000MHz ~ 50.000MHz: 40Ω max. (Fundamental) 28.000MHz ~ 70.000MHz: 80Ω max. (Third overtone)

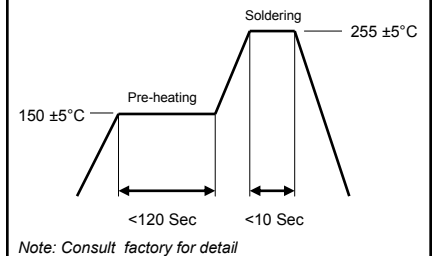
PACKAGE DIMENSIONS



SOLDER PATTERN



REFLOW PROFILE



PART NUMBERING GUIDE

HC49/SMD - A - F - 18 - 30 - - 13.000M - TR

Package Height
 A: 5.08mm max
 B: 4.20mm max
 C: 3.50mm max
 D: 2.50mm max

Mode
 F: Fundamental
 T: Third overtone

Load Capacitance
 S: Series 18: 18pF
 08: 8pF 20: 20pF
 10: 10pF 22: 22pF
 12: 12pF 28: 28pF
 16: 16pF 32: 32pF

Tolerance
 50: ± 50ppm / ± 100ppm
 30: ± 30ppm / ± 50ppm
 25: ± 25ppm / ± 30ppm
 20: ± 20ppm / ± 25ppm
 10: ± 10ppm / ± 20ppm
 X: Custom range

Other Options
 TR: Tape and reel

Frequency
 M: MHz

Operating Temperature:
 Blank: -10°C to 70°C
 K: -20°C to 70°C
 L: -30°C to 75°C
 ET: -40°C to 85°C
 MT: -55°C to 125°C